



2020 Post-Enumeration Survey Update

**Federal-State Cooperative for Population Estimates
2020 Virtual Fall Meeting
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Outline

- 1. Post-Enumeration Survey Overview**
- 2. Update**
- 3. COVID-19 Impacts**

Components of Census Coverage for the 2010 United States Household Population (in Thousands)

Component of Census Coverage	Estimate	Standard Error	Percent	Standard Error
Census Count	300,700	0	100.0	
Correct enumerations	284,700	199	94.7	0.07
Erroneous enumerations	10,040	199	3.3	0.07
Due to duplication	8,521	194	2.8	0.06
For other reasons	1,520	45	0.5	0.01
Whole-Person Census Imputations	5,993	0	2.0	0
Estimate of Population	300,700	429	100.0	
Correct enumerations	284,700	199	94.7	0.1
Omissions	16,000	440	5.3	0.1
Net Coverage Error	36	429	0.01	0.14

What is the Post-Enumeration Survey?

Goal

- Measure coverage of people and housing units in the decennial census
- Measure net coverage error and components of coverage

How are the data used?

- To assess the success of the current census
- To provide information to improve the coverage of future censuses

How is coverage estimated?

- Conduct a survey in sample blocks
- Match people in the PES independent survey with enumerations in the census to determine who was missed or counted in error

History

- Used in the United States census since 1950

Update

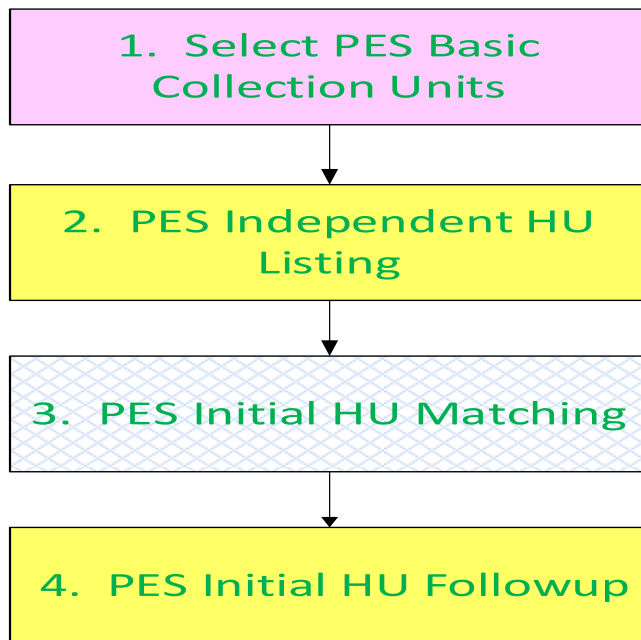
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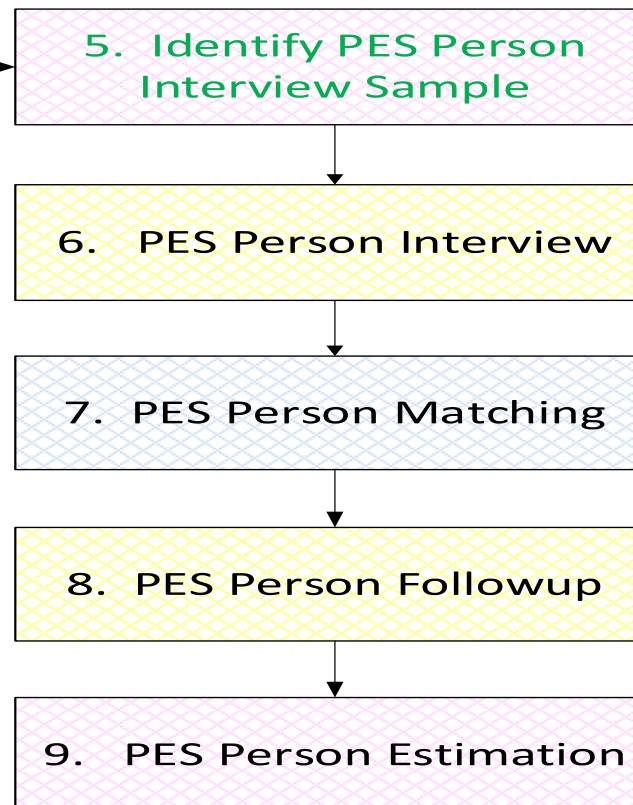
2020 PES Activities

Sampling and Estimation - Pink
Field Operations - Yellow
Matching Operations - Blue

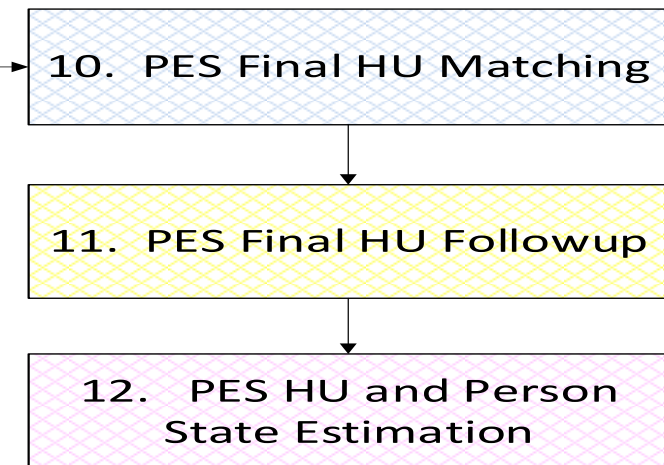
Initial Housing Unit Operations



Person Operations



Final Housing Unit Operations



Sample Results

First sample (Basic Collection Units)

- Selected 9,800 Basic Collection Units in 50 states and District of Columbia
- Selected 400 Basic Collection Units in Puerto Rico

After subsampling (expected)

- 180,000 housing units in 50 states and District of Columbia
- 8,000 housing units in Puerto Rico

Independent Listing Results

PES listing

- 510,000 housing units in 50 states and District of Columbia
- 18,000 housing units in Puerto Rico
- Using automated instrument improved standardization of addresses and computer matching of addresses

COVID-19 Impacts

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Revised field milestone schedule

Operation	Original Dates		New Dates	
	Start	Finish	Start	Finish
Independent Listing	1/16/2020	3/13/2020	1/16/2020	3/20/2020
Initial HU Followup	5/6/2020	6/19/2020	7/30/2020	9/21/2020
Person Interview	6/17/2020	9/18/2020	9/23/2020	12/18/2020
Person Followup	2/3/2021	3/26/2021	5/6/2021	7/7/2021
Final HU Followup	5/19/2021	6/18/2021	9/3/2021	10/6/2021

Operations in blue are complete.

Impact of delays on field interviews

Increased recall error. People misreport where they were living on Census Day.

Item nonresponse. People don't remember where they were living on Census Day, so they give incomplete information. Or, they leave some people off of the Census Day roster. Or they don't report all of the addresses where the household could have been counted on Census Day.

Delays result in more movers without knowledge of the Census Day household.

Unit nonresponse. Fewer people respond to the Person Interview because impact of Census campaigns diminishes and because people don't want to open their doors to talk to a stranger during a pandemic.

PES Changes

- Continuing to focus on quality
- Modifying PES field procedures to promote social distancing
- Providing event history calendars to field operations
- Adding year reference to all Person Followup questions with dates
- Adding additional review of PES data and tabulations
- Adding a source and accuracy statement to PES reports in addition to methodological reports and assessments

Schedule to Release Reports and Tables

November 2021

- National demographic estimates of net coverage of people
- National demographic estimates of components of coverage for people
- Tables can be downloaded on Census Bureau website

February 2022

- State estimates for people
- More detailed national estimates for people
- All housing unit coverage estimates

QUESTIONS?

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Backup Slides

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How PES Estimates are Created

		Enumerated in PES?	
		YES	NO
Enumerated in Census?	YES	Found in Both	Missing in PES Found in Census
	NO	Missing in Census Found in PES	Missing in Both